Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of using an adhesion precursor in an integrated circuit fabrication process, the method comprising:

providing a first gas over a dielectric material to form an adhesion precursor layer, the dielectric material including an aperture, the first gas including a ternary element of Iridium, Ruthenium, or Rhenium; and

providing a second gas including an alloying agent over the adhesion precursor layer to provide a copper layer over the adhesion precursor layer.

2. (Previously Presented) The method of claim 1, wherein the adhesion precursor layer includes a barrier material.

3. (Original) The method of claim 1, wherein the adhesion precursor layer has a thickness of 10-100 Angstroms.

4. (Original) The method of claim 1, further comprising providing a second gas of a second material over the adhesion precursor layer.

5. (Previously Presented) A method of using an adhesion precursor in an integrated circuit fabrication process, the method comprising:

providing a first gas over a dielectric material to form an adhesion precursor layer, the dielectric material including an aperture; and

providing a second gas of a second material over the adhesion precursor layer; and

providing a copper layer over the adhesion precursor layer, wherein the second gas includes tin (Sn), indium (In), zinc (Zn), or chromium (Cr.), wherein the first gas includes a ternary element of at least one of Iridium, Ruthenium, or Rhenium.

6. (Original) The method of claim 4, further comprising providing a third gas of a third material over a layer formed by the second gas.

7. (Previously Presented) A method of using an adhesion precursor in an integrated circuit fabrication process, the method comprising:

providing a gas of a first material over a dielectric material to form an adhesion precursor layer, the dielectric material including an aperture, the first material including a ternary element of Iridium, Ruthenium, or Rhenium; and

providing a second gas of a second material over the adhesion precursor layer;

providing a third gas over a third material over a layer formed by the second gas; and

providing a copper layer over the adhesion precursor layer, wherein the third gas includes an alloying element.

8. (Previously Presented) The method of claim 9, further comprising providing a gas including an alloying agent over the adhesion precursor layer.

9. (Previously Presented) A method of using an adhesion precursor in an integrated circuit fabrication process, the method comprising:

providing a gas of a first material over a dielectric material to form an adhesion precursor layer, the dielectric material including an aperture; and

providing a copper layer over the adhesion precursor layer, wherein the adhesion precursor layer includes a ternary element of Iridium, Ruthenium, or Rhenium.

10. (Previously Presented) A method of improving adhesion between a copper layer and a dielectric layer by providing an adhesion precursor, the method comprising:

forming a trench in a dielectric layer;

providing an adhesion precursor gas above the dielectric layer and the trench to form an adhesion precursor layer , wherein the adhesion precursor layer includes a ternary element of Iridium, Ruthenium, or Rhenium;

providing an alloy layer above the adhesion precursor layer; and

providing a copper layer above the alloy layer.

11. (Original) The method of claim 10, wherein the adhesion precursor layer has a thickness of 10-100 Angstroms.

12. (Original) The method of claim 10, further comprising providing a blending layer over the adhesion precursor layer, wherein the blending layer includes an alloying material.

13. (Previously Presented) The method of claim 10, wherein the adhesion precursor layer includes a material being selected from a group consisting of tantalum nitride, tungsten nitride, or disilicon nitride.

14. (Original) The method of claim 10, wherein the alloy layer has a thickness of up to 50 Angstroms.

15. (Previously Presented) A method of using an adhesion precursor for chemical vapor deposition, the method comprising:

forming a trench in a dielectric layer;

forming a continuous barrier adhesion precursor layer above the dielectric layer and along sides of the trench;

depositing copper above the continuous barrier layer, the copper located in the trench forming an integrated circuit feature, wherein the continuous barrier adhesion precursor layer includes a ternary material selected from a group consisting of Iridium (Ir), Ruthenium (Ru) and Rhenium (Re).

16. (Previously Presented) The method of claim 15, wherein the continuous barrier adhesion precursor layer includes Rhenium.

17. (Original) The method of claim 15, further comprising providing a chemical mechanical polish to level the copper to substantially the same level as the continuous barrier layer above the dielectric layer.

18. (Original) The method of claim 15, wherein the continuous barrier layer has a cross-sectional thickness of 10-100 Angstroms.

19. (Original) The method of claim 15, wherein the feature is a via.

20. (Previously Presented) The method of claim 15, wherein the continuous barrier adhesion precursor layer includes tantalum nitride, tungsten nitride, or disilicon nitride.